

REVISION OF THE AUSTRALIAN SPECIES OF THE GENERA *CURIS*,
NEOCURIS AND *TRACHYS*, TOGETHER WITH NOTES AND
DESCRIPTIONS OF NEW SPECIES OF OTHER
COLEOPTERA.

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Cerambycidae.

ATHEMISTUS NODOSUS, n. sp.

Chocolate brown; tarsi, apex and base of tibiae pale fawn colour; head and raised parts of upper surface with close adpressed downy pubescence; antennae and tarsi more strongly pubescent.

Head with a few punctures on vertex, antennae stout. *Prothorax* convex, sides evenly and very lightly rounded, sides without apparent tubercles, whole surface very uneven and dotted with coarse, subfoveate punctures, disc with five small tubercles, three in a line near middle, two smaller and closer behind these, the five outlining a subplanate area (found in other species). *Scutellum* very small and round. *Elytra* narrowly ovate, apices bluntly, separately rounded; each with three rows of prominently raised, obtuse nodules, the second row containing the larger nodules, at the base forming a crest, giving an irregular outline to base of elytra; two prominent triangular tubercles on apical declivity; on each side of suture and between the pustules are rows of large punctures more conspicuous than in *A. monticola* Blkb. *Dim.*: 7.5 × 3 (—) mm.

Hab.—Victorian Alps (Bogong High Plains, above 5,000 ft. alt., Mr. F. E. Wilson).

Two examples, one certainly ♂, have been sent by their captor for description. The species is readily distinguished from its nearest allies *A. punctipennis* Cart., and *A. tricolor* Cart., by the uneven pronotum, and the large size and small number of the elytral nodules besides the crested humeri.

Holotype in Coll. Wilson.

Buprestidae.

Neobubastes aureocincta Blk. = *Castelnaudia australasiae* Obenb.—In *Sbornik Entomol. Nat. Mus. Praze*, 1923, p. 14, Dr. Obenberger describes a species that is clearly identical with Blackburn's species, while he uses a generic title that was used by Tschitscherine in 1891 for a genus of the Carabidae (since altered to *Castelnaudina*, *Sbornik*, 1924, p. 17).

Buprestina prosternalis Obenb.—In the following page to that which contains the above species occurs a description of a new genus *Buprestina* with its genotype *B. prosternalis* Obenb. This, in many respects, is very near the genus that I (at a later date—July, 1924) described as *Notobubastes*, but certain inconsistencies make this uncertain. Thus in *Buprestina* the elytra have the "apices conjointement subarrondi", while in *Notobubastes* the apices are "tridentate". Yet in a specimen of *N. orientalis* from Wide Bay, Queensland, I find the apices irregular, the left hand apex being subtruncate, the right hand one lightly tridentate. There is also a curious contradiction in Dr. Obenberger's description. Thus in the generic diagnosis the prosternum is said to be "densement ponctué",

while under the species "Prosternum sans ponctuation, lisse" makes determination a little difficult.

Diceropygus maculatus Deyr. = *D. quadritinctus* Obenb.—I have recorded *D. maculatus* Deyr. from Darwin, North Australia (*Trans. Ent. Soc. Lond.*, 1923, p. 103). Obenberger's description evidently shows the same insect.

Briseis conica L. and G. = *B. sagitta* Obenb.—I believe also this synonymy holds good. There is no value in describing species which are so evidently close to well known species without clearly indicating their definite distinction.

Hypocisseis Thoms.—In *Archiv für Naturg.*, 1924, p. 106, Dr. Obenberger disagreed—without giving a reason—with my placing *Cisseoides* Kerr. as a synonym of *Hypocisseis*. However, in *Sbornik Entom. Mus. Praze*, 1924, p. 24, he follows this up by stating the four characters which he considers differentiate *Hypocisseis*. He has hereby strengthened my former considered opinion after a re-examination of material.

For the purpose of replying to my critic I will compare two well known species, *H. latipennis* Macl. = *laticornis* Thoms., the genotype of Thomson, with *H. suturalis* Saund., which Kerremans redescribed (1) as *Cisseoides albopicta* and (2) as *Hypocisseis aeneipes* (afterwards corrected to *Cisseoides aeneipes* in the *Genera Insectorum*) and whose types I examined in 1922.

The four characters stated by Obenberger are:—(1) "la taille beaucoup plus large, robuste et subdéprimée"; (2) "la présence de deux faisceaux de poils élevés sur le front"; (3) "le marge basale du corselet, qui est très largement rébordée"; (4) "la forme de tibias (*sic*) postérieurs, qui sont, au côté externe, légèrement relevés en gouttière (vraisemblément pour y loger les premiers articles de tarse au repos) et dont partie apicale et extérieure est subglabre ou très éparsément unisériatement épineuse, tandis que les épines citées sont chez *Cisseoides* denses et subégales, unisériatement disposées sur toute la longueur de tibiae".

With regard to (1), there is no more difference in size and form between the species in my tabulation than in other genera (e.g. *Cisseis*). Thus dimensions of *H. latipennis* are 10-12 × 4½-5 mm., of *H. suturalis* 6½-10 × 3-4 mm. Also mere size has little to do with generic distinction.

(2). The tufts of hair are merely crests to elevations bordering the eyes. All the species in my table have this elevation more or less, without the tufts of hair, as also has *H. brachyformis* Deyr., which Dr. Obenberger admits into *Hypocisseis*.

(3). This seems quite imaginary. I find no mention of it in the original description, nor any sign of distinction between the species in my tabulation.

(4). The hind tibiae of the two species differ, but only to a slight extent. There is little sign of the "gouttière". Both are flattened near apex, this flattened area extending farther in "*latipennis*" than in "*suturalis*", but both have the exterior edge sharp and strongly "unisériatement épineuse".

There is nothing of a generic character that warrants the separation of *Cisseoides* from *Hypocisseis*. Monsieur Théry has already noted his accord with this opinion (*Ann. Soc. Ent. Belg.*, 1927, p. 33).

As with all widely distributed species, *H. suturalis* Saund.—found on *Exocarpus cupressiformis* (the Native Cherry) in New South Wales, probably on allied trees in Western Australia—is very variable in size and pattern, the latter easily abraded. The four species described as *Cisseoides carteri*, *C. maduri*, *C. gebhardti* and *C. nigrosericea* are under suspicion as possible additional synonyms of this already four times described species.

Anthaxoschema Obenb. = *Notographus* Thoms.—There seems little doubt of this synonymy. The characters specially mentioned by Obenberger—the antennary cavities unseen from in front, with “ligne antérieure . . . un peu élevée latéralement en carène”, the form of pronotum, and the apical segment of abdomen are all exactly the characters which distinguish *Notographus* from *Anilara*.

Anthaxoschema terraereginae Obenb. must be very close to the species I have hypothetically diagnosed as *Notographus yorkensis* Obenb., but the abbreviated descriptions contained in the tabular form (*Entom. Blätter*, 1922, pp. 72, 73) do not enable me to state this synonymy with certainty. Both descriptions fit large and small examples of a species variable in size and widely distributed in Queensland, a fresh example of the larger fitting *N. yorkensis*, a small, stained or abraded example fitting *N. terraereginae*.

Stigmodera cara Blkb.; *S. placens* Kerr.—This is a well known species in the Stanthorpe district, S. Queensland. The ♀ (not mentioned by either author) has the abdomen concolorous with the rest of the underside—blue or violet—this region being more or less yellow in the ♂—a sexual variation noted in other species (*Trans. Roy. Soc. S. Aust.*, 1916, p. 83).

Diceropygus (Melobasis) suturalis Macl.—Monsieur Théry has recently indicated, in correspondence with me, that this species is a *Diceropygus*, though described as a *Melobasis*, and so included in my Revision. This author also shows that *Diceropygus* can only be maintained with subgeneric rank.

Synechocera elongata Thoms. = *S. (Aphanisticus) occidentalis* Macl.—This synonymy is established by the comparison of a paratype of Thomson's species, sent by Mons. Théry, with an example in my collection that is identical with Macleay's type.

Cisseis elliptica Cart. = ? *C. carteri* Obenb.—There is nothing but a slight difference of size in Obenberger's description to distinguish it from *elliptica*.

Meliboëithan Obenb.—I cannot find anything in the description of this genus to distinguish it from *Paracephala*, while the species described under it, *M. fissus* Obenb., might well be *Paracephala intermedia* Kerr.

MELOBASIS PUSILLA, n. sp.

Oblong; metallic green above and below, including appendages.

Head, including eyes, slightly wider than apex of prothorax, front wide, slightly widening in front of eyes, densely and regularly punctate. *Prothorax*: Apex and base lightly bisinuate (especially the former), sides lightly widened in middle, all angles subobtuse, disc closely covered with round punctures, becoming denser and coarser at sides, these punctures superimposed upon a minutely roughened surface, seen more distinctly on oval prescutellary impunctate patch. *Scutellum* transverse, oval. *Elytra* widening behind shoulders, lightly compressed near middle, sides subparallel, apical margins serrulate; disc closely punctate with rather vague indications of a linear arrangement, the punctures very dense (also colour brighter) near base, the humeral callus impunctate.

Underside of head and prosternal episterna coarsely, prosternum densely, metasternum less strongly, punctate; abdomen with elongate “finger-print” impressions, open behind; these very dense towards apex—except on margins; apical segment of ♂ truncate between two short spines; the larger example (? ♀) has lost the abdomen. *Dim.*: 6-7½ × 2-2½ mm.

Hab.—Queensland: Bowen (A. Simson, in Simson Collection, South Australian Museum).

Two examples of this pretty little species sent amongst some *Neocuris* are, I think, correctly placed in *Melobasis*—though at first glance taken for a *Pseudanilara*. The bispinose abdomen and the form of head and pronotum point to this position. The very slightly lineate arrangement of the elytral sculpture is not very far removed from a similar occurrence in *M. uniformis* Cart., and *M. macleayi* Cart., while it is nearer the latter in colour, but of a brighter green. *M. macleayi*, however, has the sides of prothorax quite straight, its surface punctures with a transverse tendency, and the elytral series more clearly traceable.

Holotype and allotype in the South Australian Museum.

ANILARA DODDI, n. sp.

Short and rather convex; nitid blue-black, glabrous.

Head deeply immersed in prothorax, and much narrower than it, front generally convex but clearly channelled in middle, eyes with internal margins parallel, vertex wider than the transverse diameter of an eye. *Prothorax* more convex than usual, apex arcuate, the front angles acute and depressed; base nearly straight, sides well rounded, widest at basal third, thence arcuately narrowed to apex and lightly to the subobtuse posterior angles; whole surface minutely, not densely punctate, with transverse rugae near base; without medial line or foveae. *Scutellum* nearly circular, nitid. *Elytra* slightly wider than prothorax at base, jointly at apex, basal margin raised, having a large subhumeral depression behind it; finely scalose-punctate, the punctures more distant than on pronotum. Underside nitid and almost impunctate. *Dim.*: 3 mm. long.

Hab.—Queensland: Kuranda (F. P. Dodd).

A unique example in the South Australian Museum is another of the well known naturalist's captures in this prolific region. Its abbreviated, rather wide and convex form and depressed, anterior angles suggest generic distinction. The elytra in the holotype are dehiscent and disclose a wide, nitid band at base of pronotum, with a fine, sharply serrulate margin; this band usually covered by elytra.

Holotype in South Australian Museum.

STIGMODERA MACULIFER Kerr.—I have already noted (These PROCEEDINGS, 1924, p. 19) the distinction of this eastern species from the western *S. rubriventris* Blkb. They are so frequently confused that the following comparison may be useful:—

<i>rubriventris.</i>	<i>maculifer.</i>
Form—	
Narrower, sinuate, attenuate behind, each apex obliquely acuminate.	Wider, oblong oval, rounded behind, each apex lightly bispinose, with small lunation.
Elytral intervals—	
Clearly punctate.	sub-laevigate.

Both species have the apical margins denticulate, but so faintly in *rubriventris* that its author may be excused for failing to see this; unless with the aid of a binocular microscope.

Other differences, especially of colour, are less constant, but I have lately seen such striking variations in examples from Stanthorpe, Q., that, for the present considered as a variety, may later be deemed of specific value.

S. MACULIFER Kerr. var. *AERICOLLIS* Cart. Head, pronotum and underside, except abdomen, brilliant golden coppery; elytra chiefly testaceous, fasciae

variable. In one case only the post-medial dark fascia is present with a minute apical patch; in another example even this fascia is reduced to two lateral spots and the apical patch is wanting.

PARACEPHALA BICOSTATA, n. sp.

Short, rather wide; above and below obscurely coppery, thickly clothed with recumbent silvery hair, head, pronotum and underside showing slight metallic gleams, elytra more opaque.

Head suborbicular, with deep longitudinal furrow, situated in a cuneiform excision. *Prothorax* very convex, apex advanced in middle, base strongly bisinuate, sides slightly arcuate in middle, and a little sinuate behind, posterior angles subacute, the anterior quite rounded off; disc without channel, the thick, bristly hairs tending to form an oval around a nude, raised mediobasal area. *Elytra* as wide as prothorax at base, sides subsinuate, slightly widest behind middle, shoulders forming callosities, a sinuate costa extending from each shoulder to apical declivity, parallel to suture on its hinder half; the sculpture hidden by clothing. Underside much more sparsely pilose except at sides; rather strongly punctate. *Dim.*: 4.5 × 2 (+) mm.

Hab.—Queensland (National Museum); Western Australia: Pinjarrah (A. M. Lea); Australia (S. Aust. Museum).

Seven examples examined, two from the National Museum, four in the South Australian Museum and one (No. 7303) in Mr. Lea's Coll. show a species of shorter and proportionally wider form than usual. It is clearly not one of the three species inadequately described by Dr. Obenberger*, while I think I know the other described species. It is the most densely hirsute species known to me, also the only one having a defined elytral costa (*P. intermedia* Kerr., shows a subcostiform impression due to the presence of a subsutural groove), the costa emphasized by the clothing, as with the raised part of pronotum. I cannot distinguish any sexual characters.

Var.—A specimen from Ardrossan, S.A. (G. Tepper), in the Adelaide Museum is I consider conspecific, differing from the typical form in its larger size (6 mm. long) and more metallic but strongly pubescent surface.

Holotype and paratype in National Museum.

SYNECHOCERA LONGIOR, n. sp.

Elongate, parallel, depressed; black, subnitid; everywhere with a short, sparse, inconspicuous pale pubescence.

Head globose, the front with a deep incision, dividing it into two lobes; eyes not prominent, antennae having segments 6-11 dentate, the 5th also a little enlarged at apex. *Prothorax*: Apex lightly, base more strongly sinuate; anterior angles produced but deflexed, posterior obtuse; widest at anterior third, there as wide as elytra at shoulders, thence arcuately narrowed each way; disc with elongate-oval depression at anterior middle, with small, sparse, setose punctures. *Scutellum* rather large, acutely triangular. *Elytra* parallel for the greater part (very slightly obovate), widest at subgibbous shoulders and behind middle, apices very slightly dehiscent and separately rounded, their margins entire; disc covered with lightly impressed punctiform depressions, each bearing a short white hair,

* Archiv für Naturg. 1924, p. 155. No comparison with existing species is given, nor any note to show the author's knowledge of them. Moreover, there is little in the description of *P. niveiventris* to distinguish it from *P. strandi*, while I think it is certain that *P. impressicollis* Obenb. = *P. transsecta* Cart.

each elytron with a faintly indicated costa throughout its length; underside even more lightly than the elytra but similarly impressed. *Dim.*: 7.5-9 × 2.2-5 mm.

Hab.—Victoria, South Australia and Western Australia.

Five examples are before me, that I had provisionally labelled *elongata* Thoms., but Monsieur Théry has recently sent me a paratype of Thomson's species that is unmistakably identical with *occidentalis* M̄acl.

S. longior differs from *elongata* in larger size, black colour, much finer sculpture, stronger frontal excision; the pronotum longer and relatively narrower, its front margin less produced in middle; the base of elytra less strongly bent (almost forming two semicircles in *elongata*). Three examples (the type series) were taken by Mr. J. E. Dixon at W. Warburton, Victoria; one is from a series taken at Lucindale, S. Australia and the fifth was taken by myself at Geraldton, W.A. This distribution is very wide, but I cannot separate the individuals specifically. The Geraldton example is a more nitid black with, possibly, finer sculpture and less obvious setae, but it is, at most, only a variety.

S. setosa is smaller and more cylindrical, while *S. tasmanica* Thoms. has a subcircular prothorax. Type series in Coll. Carter.

Revision of the Genus Curis L. and G.

Though I have only one new species to add there are some corrections to make in the nomenclature, and a tabulation to add that will, I trust, make the study of this beautiful genus clearer.

The Synopsis of Fairmaire, published in 1877 (*Ann. Soc. Ent. France*) was the last general survey of the group, since when six species have been added, one each by C. O. Waterhouse and Blackburn, three by myself and one by Obenberger. Twenty names have been published for species, of which six are, I consider, synonyms, while one, *C. despecta* Fairm., is unknown to me. The remaining thirteen are tabulated below, together with the new species. The genus is specially interesting in that it is, I think, alone of Buprestidae, in having representatives in South America, three species being recorded by Kerremans in 1902 from Chili. I have one of these, *C. bella* Guér., kindly sent by Mons. Théry, that is strikingly close to some of the Australian species.

Fairmaire's synopsis contains so many inconsistencies, while the characters by which he defines his groups are of so doubtful value that I have not made much use of his arrangement. Thus *C. perroni* L. and G. is placed, together with *C. despecta* Fairm., under group A, of which the chief distinction is "caput antice non aut vix impressum", yet in his following description occurs "capite . . . longitudinaliter impressum". A little further on he says "elytris apice acuminatis, tenuiter serrulatis, apice obtuse rotundato". If one may adopt the second part in each of these cases and eliminate the first, the determination of this name by the late Canon Blackburn for an insect in the South Australian Museum—labelled Australia—is, I think, correct. This interpretation is corroborated, so far as concerns the frontal impression, by the note under *despecta* which states that "tête . . . plus largement et moins profondément excavée" though this leaves the group character of A still more incomprehensible.

Colour.—Bewilderingly varied in some species, so that I have, except where colour characters are more or less constant, taken structure and sculpture as a surer guide.

Structure.—Dr. Obenberger lays much stress on the width and form of the interocular front of head. I find this is partly a matter of sex; as is also the

question of dimensions. Thus in examples of *C. splendens* Macl., taken by Mr. C. F. Denquet at Armidale, N.S.W., I find the following:—

A. ♂ ($11\frac{1}{2} \times 4$ mm.) front passes from 1 (+) mm. at base to about $1\frac{1}{2}$ mm., at its widest.

B. ♀ (18×6 mm.) from $1\frac{1}{2}$ mm. at base to 2 (+) at widest.

Thus in A it would approach the term "parallel" as used by Obenberger, while in B it would be clearly "divergent". I note similar sexual distinctions in other species. In both sexes the abdomen is bispinose and emarginate at the extremity, though this is much obscured and less evident in the female, by the presence of the produced apical sternite and I have noted one species, *C. obscura* Cart., in which the spines are reduced to tubercles.

I have already published (These PROCEEDINGS, 1924, p. 531) my reasons for considering the genus *Neocuroopsis* as redundant.

Table of Curis.

1. Elytra unicolorous	2
Elytra more or less variegated	6
2. Elytra brilliantly metallic	3
Elytra obscure purple-brown	<i>obscura</i> Cart.
3. Elytra coppery	<i>corusca</i> Waterh.
Elytra metallic green, blue or purple	4
4. Elytra finely punctate-striate, intervals not rugose	<i>spencei</i> Mann.
Elytra coarsely punctate, intervals rugose	5
5. Pronotum concolorous, in middle carinate anteriorly, lightly excavated posteriorly	<i>viridicyanea</i> Fairm.
Pronotum, medial area violaceous; medial excavation continuous throughout without carina	<i>chloriantha</i> Fairm.
6. Elytra without raised costae (lines that represent them are traceable)	<i>olivacea</i> Cart.
Elytra more or less costulate	7
7. Margins of elytra serrulate, elytra of normal length	8
Margins of elytra entire, elytra abbreviated	<i>splendens</i> Macl.
8. Elytra "fusco-aenea" save for marginal coppery vitta	9
Bright metallic area of elytra limited to basal region	<i>regia</i> , n. sp.
Bright metallic area of elytra not limited as above	10
9. Pronotum concolorous, elytral costae prominent, intervals finely punctate	<i>perroni</i> L. and G.
Pronotal margins coppery, elytral costae not prominent, intervals coarsely punctate	<i>intercibrata</i> Fairm.
10. Bright metallic area of elytra limited to base and margins	<i>discoidalis</i> Blkh.
Bright metallic area of elytra limited to suture and margins	11
11. Sutural metallic area narrow; elytral punctures sublineate	<i>aurifera</i> L. & G.
Sutural metallic area expanded behind, elytral punctures irregular	12
12. Pronotal colours in vittae, hind tibiae normal (narrow)	<i>caloptera</i> Boisd.
Pronotal colours not in vittae, hind tibiae wide	<i>yalgoensis</i> Cart.

Synonymy.

- aurifera* L. & G. = *aurovittata* Boh. (typ. comp. Saunders).
- caloptera* Boisd. = *dives* Hope (typ. comp. K. G. Blair) = *aurovittata* Kerr. (nec Boh.) var. *formosa* Gestro (also det. Kerr.); var. *confusa* Obenb.
- splendens* Macl. = *brachelytra* Fairm. = *splendens* Cart. (nec Fairm.) = *fairmairei* Cart.

Notes.

C. despecta Fairm. is unknown to me, and has been omitted from my table.

C. chloriantha Fairm. is not a synonym of *spencei* Mann, as stated by Kerremans (*Gen. Ins.*). Two specimens from Western Australia (Coll. Lea and S. Aust. Mus.) are clearly distinct from both *spencei* Mann, and from *viridicyanea* Fairm., as stated in my table, though it is much more closely allied to the latter.

C. corusca Waterh.—A mutilated example of this is in the South Australian Museum from Adelaide. Its author gave no locality.

C. spencei Mann.—I possess a single example of this taken by Mr. H. Giles at the Drysdale River, N. W. Australia.

C. viridicyanea Fairm.—A widely distributed species from various parts of North Queensland (one example is labelled Adelaide in the South Australian Museum). It varies in colour from bright green to blue or violet-blue.

C. splendens Macl.—Through a misidentification my note on this species (These PROCEEDINGS, 1924, p. 531) is erroneous. *C. splendens* Macl. = *C. splendens* Fairm., and the superfluous name *fairmairei* Carter must be sunk.

C. perroni L. & G.—A single specimen of this rare insect is in the South Australian Museum, Blackburn Coll., without a legible locality label. It was described from Kangaroo Island.

C. discoidalis Blkb.—The author thought that this was closely allied to *intercibrata* Fairm., but it is abundantly distinct by its sculpture, apart from colour, the margins of pronotum and elytra being coarsely and definitely punctate, while in Fairmaire's species the sides of pronotum are closely rugose and of the elytra very finely punctate.

C. caloptera Boisd. var. *formosa* Gestro.—With a long series before me I find a perfect gradation from the normal to the more brilliantly coloured form that is clearly *formosa* and which appears most often in Queensland examples. I have also specimens from Victoria. *C. confusa* Obenb. cannot be separated from *formosa*. The distinctions stated by this author are, I consider, merely individual or sexual.

CURIS REGIA, n. sp.

♀. Oblong; head golden green, pronotum with wide margins and narrow medial vitta golden green, cyaneous on each side of the latter; elytra chiefly purple with cyaneous gleams, these showing especially on the subobsolete costae; basal margins and the suture near scutellum golden, underside metallic peacock-blue-green, the margins of segments, apex of abdomen, antennae and legs blue.

Head widely and deeply excavate, strongly, not densely, punctate, inner margins of eyes sub-parallel. *Prothorax*: Apex nearly straight, slightly produced at the acute anterior angles, base strongly bisinuate (more so than in *caloptera* Bdv.), sides lightly rounded, widest near middle, thence sub-obliquely narrowed each way, rather more strongly so in front than behind; posterior angles subacute and a little produced, this emphasized by an elongate depression near basal margin; a deep elongate-elliptic fovea at middle, covering basal half, having a fine carina visible at bottom of this, continuous with a smooth medial line on apical half; surface at middle and sides moderately punctate—the punctures more distant towards sides and subobsolete on the convex blue area. *Scutellum* circular, with a longitudinal depression. *Elytra* rather sharply and separately rounded behind, not quite covering body, margins serrated; three unusually faint and nitid costae just apparent, the punctures of intervals moderate near base, soon becoming gradually finer from base to apex, with a perceptible lineate arrangement. Under-side moderately punctate, more strongly on prosternal episterna than elsewhere, punctures otherwise very fine and shallow. *Dim.*: 13 × 5 mm.

Hab.—King Plains, North Australia.

A single female example in the National Museum is nearest—though not very close—to *C. caloptera* Bdv., but differs, besides markedly in colour, in the more deeply excavate pronotum with its more strongly bisinuate base, less rounded sides, and the much finer surface punctures, both of pronotum and elytra. In fact it is the most finely punctate of all except *olivacea* Cart., while in its little raised costae it is intermediate between *caloptera* and *olivacea*. ♂ wanting.

Holotype in the National Museum. The name is suggested by its purple elytra as also by its habitat.

Revision of Neocuris Fairm.

Since Fairmaire published his Synopsis of *Curis* and *Neocuris* in 1877, a good deal of uncoordinated work has been done. Blackburn has already pointed out (*Trans. Roy. Soc. S. Aust.*, 1887, p. 249) the unsatisfactory diagnosis of *Neocuris* given by Fairmaire, in which the one character, of those mentioned by him, which distinguishes *Neocuris* from *Curis* is the shorter basal segment of the hind tarsi. Other unmentioned distinctions are (a) pronotum without medial impression, (b) elytra non-striate, rarely with any sign of seriate arrangement of sculpture. Thanks to help from my friends of the British and respective Australian Museums, considerable material is at my disposal, and I have been able to identify with some certainty the majority of recorded species. There are, I find, 38 published names, two by Hope, two by Macleay, eleven by Fairmaire, four by Blackburn, six by myself and thirteen by Obenberger. Of these the following is the result of my inquiry: Species removed to *Pseudanilara*, 3; Synonyms or varieties (as below), 11; total, 14; leaving 24 good species, to which three more are added below, making 27 existing species, of which 25 are tabulated as follows (two, *smaragdifrons* Oben., and *nickerli* Obenb., are omitted as unknown to me):

Table of Neocuris.

1. Elytra partly yellow	2
Elytra with metallic impressions	7
Elytra unicolorous	8
2. Yellow markings consisting of a transverse medial fascia	<i>guérini</i> Hope.
Yellow markings otherwise	3
3. Yellow colour pervading whole elytra	<i>asperipennis</i> Fairm.
Apices of elytra dark	4
4. Dark colour widely invading the yellow area both at base and apex	<i>ornata</i> Cart.
Dark colour of elytra not so	5
5. Pronotum brown with metallic gleams	<i>discoflava</i> Fairm.
Pronotum green or violaceous	6
6. Elytral punctures distinct and frequent	<i>browni</i> Cart.
Elytral punctures indistinct and sparse	<i>doddi</i> , n. sp.
7. Elytra atro-violaceous, with three coppery impressions	<i>fortnumi</i> Hope.
Elytra blue with eight golden pubescent impressions	<i>auro-imprensa</i> Cart.
8. Pronotum with margins (at least) metallic	9
Pronotum unicolorous	15
9. Elytra blue*	10
Elytra obscure bronze or black	12
10. Whole, or great part of, pronotum fiery coppery	<i>thoracica</i> Fairm.
Margins only metallic	11
11. Form wide, subobovate, pronotum rounded at sides, front clearly impressed	
.....	<i>cuprilatera</i> Fairm.
Form narrow, subparallel, pronotal sides nearly straight, front not impressed	
.....	* <i>gracilis</i> Macl.
12. Form rather wide, elytra dark violaceous bronze	<i>anthaxioides</i> Fairm.
Form narrow, elytra black or nearly so	13

13. Elytra black † ? *obscurata* Obenb.
 Elytra obscurely bronze or brown 14
14. Form depressed, subopaque † ? *carteri* Obenb.
 Form subconvex, nitid *pauperata* Fairm.
15. Surface glabrous 16
 Surface pilose 22
16. Surface brilliantly metallic 17
 Surface dark coloured 20
17. Bicolourous, pronotum green, elytra coppery *dichroa* Fairm.
 Unicolorous, green or blue 18
18. Length 8½ mm. (or more), elytra "obsoletissime costulatis", colour peacock-blue
 *monachroma* Fairm.
 Length less, elytra not as preceding, colour generally green 19
19. Length 5-7 mm., colour peacock green (not rarely blue: var. *sapphira* Cart.), head
 impressed *viridimicans* Fairm.
 Length 4 mm., or less, colour golden green, head convex *viridiaurea* Macl.
20. Colour (of pronotum at least) blue-black *fairmairei* Blkb.
 Colour (of pronotum at least) bronze 21
21. Length 8 mm., elytra subviolaceous, prothorax converging from base to apex
 † *crassa* Obenb.
 Length 4 mm. (or less), elytra concolorous with pronotum, prothorax subparallel
 *aenescens*, n. sp.
22. Form wide, head clearly impressed, upper surface coarsely punctate, hairs long .. 23
 Form narrower, head convex, upper surface finely punctate, hairs short
23. Colour clear indigo-blue, elytra rugose punctate *coerulans* Fairm.
 Colour nearly black, elytra much more closely and simply punctate .. *pubescens* Blkb.

* Colour variable in *gracilis* and *pauperata*; in old examples sometimes nearly black, with the cyanous tinge faint.

† Hypothetically determined.

Synonymy.

1. *N. ornata* Cart. = *hoscheki* Obenb.
2. *N. browni* Cart. = ? *luteo-tincta* Obenb.
3. *N. cuprilatera* Fairm. = ? *indigacea* Obenb.
4. *N. gracilis* Macl. = *soror* Fairm. = ? var. *atra* Obenb. = ? var. *ignota* Obenb.
 = *oblongata* Obenb. = var. *lepida* Obenb.
5. *N. anthaxioides* Fairm. = var. *livida* Cart.
6. *N. viridimicans* Fairm. = var. *sapphira* Cart.
7. *N. coerulans* Fairm. = ? *pilosula* Obenb.
8. *Pseudanilara (Anthaxia) cupripes* Macl. = *N. dilataticollis* Blkb.
9. *Pseudanilara (Anthaxia) purpureicollis* Macl. var. *nigra* Macl. = *N. nigricans* Blkb.
10. *Pseudanilara (Neocuris) pilosa* Cart. = *N. pilosa* Cart.

The first name holds good in each case.

Notes on Synonymy.

With regard to (1) and (2), I understand that Dr. Obenberger was unaware of my paper (These PROCEEDINGS, 1912, pp. 509-510 with text-fig. of *N. ornata*) when he published his first two (above) in *Col. Rundsch.* 1917; but in *Sbornik Ent. National Museum of Prague*, 1923, he has described no less than eleven new species, in addition to naming two new varieties, these eleven descriptions containing no single word of reference to recorded species. In small insects, difficult to determine from description—even when it is given in some detail—a note of comparison with its nearest allies is highly desirable, and would serve to show the author's knowledge of such species. Dr. Obenberger, however, gives himself away at the beginning of his first description (*N. pilosula*) by the state-

ment. "Differs from all known species by her pilose body", when three known species have a similar clothing to that described by him, of which in two cases, *pubescens* Blkb. and *pilosa* Cart., this clothing is indicated in the name; while in *coeruleans* Fairm., there is an unfortunate omission in the author's description—though the fact of its pilose clothing is well known, and is shown in an example sent from the British Museum. Except for the words "head without median impression" the description of *pilosula* would fit *coeruleans* Fairm., or *pubescens* Blkb., and this is a variable character in some species.

I have hypothetically determined three of Obenberger's species, namely, *carteri*, *obscurata* and *crassa*, from the material under examination, while two are unknown to me, *smaragdifrons* and *nickerli*. I believe the remaining six to be synonyms or varieties of recorded species.

N. guérini Hope var. *subtilis*.—Nothing in his description of this is inconsistent with quite usual forms, included in the descriptions of Saunders (*Trans. Ent. Soc. Lond.*, 1868, p. 20) or of Fairmaire, and the name *subtilis* is superfluous.

N. indigacea Obenb.—The description of this clearly applies to a species that is moderately common around Sydney and the Blue Mountains, that I have long ago determined as *cuprilatera* Fairm., though the habitat of this is stated by its author as King George Sound, W.A. There is nothing like it amongst the W.A. material before me.

(5). Allowing for considerable variation in size, the two examples of *N. livida* Cart., in the Melbourne Museum are conspecific with *N. anthaxioides* Fairm. (as determined by C. O. Waterhouse and Blackburn) and my name should not be retained, except as a variety. The five other examples before me agree with Fairmaire's dimensions, 4.6 mm. long. Both examples of *livida* are 8 mm. long.

(8, 9, 10). I have already published the synonymy of *N. dilataticollis* Blkb. with *Pseudanilara cupripes* Macl. I now find from a specimen, compared with type, that *N. nigricans* Blkb., is identical with *Ps. purpureicollis* var. *nigra* Macl. *N. pilosa* Cart., is also clearly a *Pseudanilara*, distinct from *P. cupripes* in colour, clothing and sculpture and must be known as *Pseudanilara pilosa* Cart.

There is considerable variability in colour and size. With regard to colour Fairmaire's group I.b is defined by "Prothorax cupreo- aut cyaneo- aut viridi-marginatus". But amongst these are species like *pauperata* Fairm., in which the "plus minusve" of his description is amply justified, since this common South Australian and Victorian species shows every variety from those in which this character is clear to others where only the faintest gleam is discernible. Again *N. gracilis* Macl., shows colour variation from "cupreo" to "viridi-marginatus" that is associated with its wide distribution from North Queensland to Sydney; and which Fairmaire stated of *soror*, the Sydney form, which cannot be distinguished from the type of *gracilis* from Gayndah, Q. The variation from metallic green to blue or violet is common in this genus as with *Melobasis* and *Stigmodera*. I did not sufficiently allow for this when describing *N. sapphira*, which name must be sunk, as below. In more than one species I have seen variations of size from 4 mm. to 7 mm. (in one case to 8 mm.) long. The following show the distribution of the species from examples examined:—
guérini Hope.—N. S. Wales, S. Qld., and S. Aust.
fortnumi Hope.—Vict., and S. Aust.
gracilis Macl.—Sydney, N.S.W., to Cairns, N. Qld.
viridiaurea Macl.—N. W. Aust.
asperipennis Fairm.—S. Aust., a long series from Oodnadatta (Blackburn).

- thoracica* Fairm.—S. Aust., W. Aust., and Western N. S. Wales (Bogan R.).
discoflava Fairm.—Perth and Fremantle, W. Aust.
cuprilatera Fairm.—N. S. Wales.
anthaxioides Fairm.—S. Aust. to W. Aust.
pauperata Fairm.—Vict., and S. Aust., W. Aust., and Western N. S. Wales
 (Bogan R.).
dichroa Fairm.—S. Aust.; and W. Aust.
monochroma Fairm.—North Vict., and S.W. of New South Wales (Young).
viridimicans Fairm.—W. Aust. (in Geraldton district, Mrs. G. A. Waterhouse
 found this in several instances inside an "everlasting" flower, *Helichrysum*
 sp.).
coeruleans Fairm.—N. S. Wales, Vict., and Qld.
pubescens Blkb.—S. Aust. to W. Aust (1 ex. Qld.).
fairmairei Blkb.—S. Aust.
ornata Cart.—S. Qld.
browni Cart.—Cue and Southern Cross, W. Aust.

Of the rest the material is more scanty. *Neocuris* are not numerous in collections and are seldom found otherwise than in single examples, generally on flowers, especially of *Eucalyptus* and *Leptospermum*. The following are new species:

. *NEOCURIS DODDI*, n. sp.

Ovate, head, pronotum and scutellum violaceous blue, elytra yellow, with a narrow basal and sutural border shoulder spot. apices (widely) and apical half of lateral margins violet-blue; underside and appendages dark blue.

Head wide, impressed and lightly canaliculate on front, strongly and closely punctate. *Prothorax* widest at base, sides obliquely—scarcely arcuately—narrowed to apex, apex arcuate, anterior angles (seen from above) a little advanced, base bisinuate, posterior angles subrectangular, an indistinct triangular impression at base; disc very nitid with sparse shallow punctures at middle, round, large, close punctures at sides. *Scutellum* small. *Elytra* as wide as pronotum at base, separately rounded and finely denticulate at apices, with deep triangular depression near shoulder; scalose-punctate, the punctures somewhat transverse, in places showing faint signs of a seriate arrangement; underside clearly punctate, clothed with decumbent silvery hair. *Dim.*: 5.5 × 2.5 mm.

Hab.—S. Queensland; Chinchilla (Mr. A. P. Dodd).

A single specimen, kindly given me by its captor, shows an affinity with the Western Australian species *N. browni* Cart., from which it differs by its concolorous and nearly straight-sided pronotum, besides other colour distinctions. The deeply excavate subhumeral depression is a marked character. A second example has (since writing the above) been shown me by Mr. J. Armstrong from Bogan River, N.S.W., and a third example from Warra, S. Queensland, is in the National Museum.

Type in Coll. Carter.

N.B.—I find that I described *N. browni* as having the elytra finely punctate-striate, but (as also in the above species) the punctures only very vaguely show any seriate arrangement and are nowhere striated.

NEOCURIS AENESCENS, n. sp.

Oblong, moderately convex, dark bronze above, elytra tending to purple or coppery towards apex; head and antennae green or coppery, legs and underside purple-bronze; entirely glabrous and nitid.

Head wider at eyes than apex of pronotum, front not impressed, slightly diverging behind; closely and evenly punctate. *Prothorax*: Apex and base bisinuate, sides nearly straight, very lightly narrowed from base to apex, densely (contiguously for the great part) covered with punctures larger and more shallow than those on head, the apical border metallic, like the head. *Elytra* of same width as prothorax at base, shoulders with an elongate swelling, a light depression inside this, sides a little sinuate, with a wide incurved bay behind shoulders, apices separately, obtusely rounded, their margins serrulate, surface irregularly scalose-punctate; underside lightly punctate. *Dim.*: 4 (—) mm. long.

Hab.—N. S. Wales: Bogan River (Mr. J. Armstrong).

A rather narrow, convex little species, without any tendency to metallic side margins to pronotum. Nearest to *pauperata* Fairm., but without a sign of frontal impression, and more convex than that species besides colour differences.

Holotype in Coll. Carter.

NEOCURIS VIOLACEA, n. sp.

Elongate, oblong and depressed; above uniformly violaceous, clothed with short, rather dense, upright white hair; underside nearly black, femora and margins of abdominal segments violet, oral organs, antennae and tarsi castaneous; the apical segments of antennae pilose.

Head, at eyes not as wide as apex of pronotum, with a short sulcus only at extreme vertex, dotted closely with very small punctures, each bearing a short upright hair. Eyes rather prominent, the frontal interspace diverging in front and behind them. *Prothorax* short and wide, apex nearly straight, lightly produced at the depressed, obtuse anterior angles, base lightly bisinuate, posterior angles obtuse, sides well rounded, widest behind middle, thence subsinuate behind, and arcuately narrowed to the front; disc closely dotted with small piliferous punctures. *Scutellum* small, subcircular. *Elytra* wider than prothorax at base and about four times as long, sides subparallel (very little compressed in middle), separately rounded behind and minutely crenulate at hind margins; closely covered with small round punctures; underside with more distant and shallow punctures and bearing more sparse recumbent hairs. *Dim.*: 5 (+) mm. long.

Hab.—N. S. Wales: Nambucca River (H. J. Carter).

I took a single ♀ example near Bowraville. It can only be confused with *coerulans* Fairm., and *pubesceus* Blkb. In both of these the form is wider, the head concave, the elytra more convex and the whole surface much more coarsely punctate with longer hairs, and the antennae are metallic. It is in form somewhat like a species that I have provisionally determined as *obscurata* Obenb. ♂ wanting.

Holotype in Coll. Carter.

TRACHYS.

I have before me 40 examples of the genus *Trachys* that belong to, at least, seven distinct species, allowing for some variation. These forty vary in size from 2 mm. long to slightly more than 3 mm. long. The chief distinctions lie in ground colour, presence and pattern of pubescent clothing, outline and, especially, the form of the head. In the last the anterior outline may be nearly straight, or deeply arcuately excised, with varying width. All have the sublateral carina on the elytra except *T. Blackburni* Kerr., of which a type example has been sent

from the British Museum (Kerremans labelled *all* his examples of a new species "type").

Eight names have been published for Australian species, of which the earliest was *T. australasiae* Gestro in 1877. It is curious to read that both Van d. Poll and Macleay claim their respective species (*frenchi*—1887 and *australis*—1888) to be the first Australian species to be described, yet Gestro's seems to be quite distinct from those later described in having its "prothorax vittis tribus" in combination with the other characters mentioned. I have determined a single example from the South Australian Museum as *T. australasiae* Gestro as being (a) the only specimen before me that can be fitted to Gestro's description, (b) also taken at Somerset, C. York (C. T. McNamara), Gestro's locality.

Of the other seven names, I have examined types or examples that have been compared with types of five, viz. *australis* Macl., *blackburni* Kerr., *frenchi* V. d. Poll., *nigra* Macl., and *socialis* Lea, while I have hypothetically determined a unique from Somerset as *pauperula* Kerr., though this species is said to come from New South Wales. This determination, with a query, is preferable to describing as new a unique example that is at least very near to Kerremans' species. I have, with less doubt, determined five examples (three from Somerset in the South Australian Museum and two, from Cape York and Cairns respectively, in the Macleay Museum) as *T. albo-picta* Kerr., a species described as from New Guinea but likely to occur on Cape York.

Synonymy.—*T. frenchi* V. d. Poll. = *T. nigra* Macl. = ? *T. hackeri* Obenb.

This synonymy seems certain. An example of *frenchi* from Kuranda, Q. (compared with type by its author) has been sent me from the British Museum and is identical with the unique type of *nigra* in the Macleay Museum. Two other specimens in the Macleay Museum from Cairns are also conspecific, though of a rather brighter metallic ground colour. This character agrees with V. d. Poll's description. It is probable that the darker surface of *nigra*, as also of the British Museum example of *frenchi*, is due to immersion in spirits. *T. hackeri* Obenb., is vaguely described, the only reference to the anterior outline of head being (a) "front between eyes rather strongly attenuate anteriorly" and (b) "without distinct median impression". Interpreting the latter to mean that the anterior outline is nearly straight, I find this character true of only one of my seven species, namely, *T. frenchi*—and the remainder of Obenberger's description is in agreement with the example of V. d. Poll's insect before me.

The seven species may be tabulated as follows:—

1. Species having elytra without sublateral carina	<i>blackburni</i> Kerr.
Species having elytra with sublateral carina	2
2. Head with front lightly arcuate, almost straight	<i>frenchi</i> V. d. Poll.
Head with front more or less deeply, and arcuately excised	3
3. Pronotum with trivittate pubescence	<i>australasiae</i> Gestro.
Pronotum without such pubescence	4
4. Ground colour of upper surface golden or brassy*	<i>australis</i> Macl.
Ground colour of upper surface purplish or bronze	5
Ground colour of upper surface black or nearly so	? <i>albo-picta</i> Kerr.
5. †Size larger, head narrower	<i>socialis</i> Lea.
Size smaller, head wider and less deeply excised	<i>pauperula</i> Cart. (? Kerr.)

* Four examples from Townsville (F. P. Dodd) in the British Museum collection are apparently only a colour variety (ground colour a darker bronze) of *australis* Macl., which I should hesitate to describe as distinct.

† The punctures arranged in lines, on the elytra, are much larger than in the case of *australis* Macl., in which they are very fine; otherwise some examples of *socialis* are like a large *australis*.

Tenebrionidae.

Synonymy.—*Leichenum seriehispidum* Mars. = *L. variegatum* Klug. = *Endothina squamosa* Cart.

In my "Check-list of Australian Tenebrionidae" (*Aust. Zool.*, 1926) I stated (p. 123) the possibility of *Endothina* being congeneric with *Leichenum*. Mr. K. G. Blair now confirms this, after an examination of specimens I sent him from Cairns. The geographical distribution of this sea-beach dweller is very remarkable, in Australia occurring, at least, from Sydney to Cairns; *L. seriehispidum* is from China and Japan, and *L. variegatum* was described from Madagascar. The name *Endothina* thus drops out.

MICROCRYPTICUS (PLATYDEMA) SCRIPTIPENNIS Fairm.—Four examples of this, taken by Mr. F. H. Taylor, at Townsville, Q., have been determined by Mr. K. G. Blair. The wide distribution of this insect is even more remarkable than that of *Leichenum*. The type is from E. and W. Africa, while there are examples in the British Museum from India, Ceylon, Java, Borneo, Celebes, New Guinea, West Indies and Brazil.

Saragus confirmatus Pasc. = *S. opacipennis* Macl. Specimens of the latter, determined by me, have been compared with Pascoe's type by Mr. Blair.

In each of the above the first name takes precedence.

NOTOCERASTES TRICORNIS, n. sp.

Oblong, opaque chocolate-brown, variegated by an adpressed clothing of paler colour, appendages more or less concolorous brown.

Head with two small triangular horns at sides of clypeus, formed by a sub-vertical extension of antennal orbit, and a frontal horn transversely triangular between the eyes; eyes large and prominent, antennae stout, pilose, extending to base of prothorax when at rest; segments 1-2 cup-shaped, 1 wider than 2, 3-8 widely oval, 3 longer than 4, 9-11 much wider than preceding, forming a loose club. *Prothorax*: Apex vertically and horizontally sinuate, anterior angles wide and depressed, apical margin rising in middle towards two parallel crests and hollowed between these; base lightly sinuate, widest near front, here rather widely rounded, thence lightly narrowing to the dentate but obtuse hind angles; lateral margins irregularly crenate, rather widely concave within these; disc with surface uneven, clothed with a dense recumbent mat of coarse hair having a transverse tendency except at the two medial ridges near apex, where hairs are arranged longitudinally. *Scutellum* transverse. *Elytra* wider than prothorax at base and about two and a half times as long; shoulders narrowly rounded and prominent; sides parallel, lateral margins only visible from above at apical third, here clearly serrulate; each with four lightly raised costae, the suture also a little raised; between each pair of costae two lines of foveate punctures (in places obscured by derm), the paler clothing occupying a wide basal area, a less wide fascia near apical declivity and irregular patches elsewhere. Underside and legs as in *N. blackburni* Cart. *Dim.*: 6 × 2.6 (approx.) mm.

Hab.—Queensland National Park, MacPherson Range.

I took a single ♂ example in January last by beating the dense foliage at the edge of the scrub. It is certainly conspecific with *N. blackburni* from which it obviously differs in (1) wider and more depressed form, (2) the three-horned head of ♂, (3) the costate elytra. The coarse, pilose derm is similar but more variegated, the antennae are coarser and more strongly clavate, the eyes are larger and the pronotal surface more uneven. Mr. K. G. Blair, to whom I sent

the insect for examination, now suggests the synonymy of *Notocerastes* with *Phaennis*; and the armature of the head of the above species certainly agrees with this suggestion—as also the antennal structure. The clothing of *Phaennis* is quite different, having the long upright hairs characteristic of *Ectyche*, whilst the excised hind part of the pronotum continues the likeness. For the present, therefore, I would retain these genera as separate.

Holotype in Coll. Carter.

ADELIUM ABNORME, n. sp.

Widely oblong ovate; nitid black, tarsal clothing red with white hairs interspersed.

Head finely rugose-punctate, clypeus rounded, not raised nor prominent in front of eyes, antennae not extending to base of prothorax; segments subconic, 3 about as long as 4-5 combined, 9-10 transverse, 11 pyriform, wider and longer than 10. *Prothorax* very transverse, apex and base about equally wide, apex arcuate-emarginate, anterior angles acute, base subtruncate, posterior angles rather squarely dentate, its points directed outward, forming an angle of about 80°; widest behind middle, sides widely rounded, arcuately converging in front, strongly sinuate before hind angle; disc coarsely, irregularly punctate, with close elongate punctures, having slightly rugose boundaries near middle and sides, elsewhere punctures round and contiguous; sculpture continuous to margins, without special foliation; medial channel clearly impressed throughout. *Elytra* considerably wider than prothorax at base, widely oblong (5 × 4 mm.), humeri obtusely rounded, epipleural fold forming sharp ridge; sulcate, the ten sulci irregularly and sparsely punctate; intervals 1-5 convex, 6-8 sharply costate, all intervals strongly punctate; a few larger punctures within the sulci on sides of intervals. Prosternum coarsely punctate, abdomen sublaevigate, post-intercoxal process truncate; postcoxae with 1st segment longer than 4th. *Dim.*: 8 × 4 mm.

Hab.—S. Queensland: Stanthorpe (Mr. E. Sutton).

A single example given me by the above keen local naturalist, shows a small wide species readily determined by its combination of wide form, strongly dentate hind angles of prothorax, and the unusual sculpture of the elytra. This is uniformly sulcate, and devoid of any regular seriate punctures. *A. striatum* Pasc. is the only species in which the sulci are entirely impunctate. *A. violaceum* Cart. has the seriate punctures small and inconspicuous, but is differently shaped and coloured. The black colour extending to the appendages—even to the tarsi, except the clothing—is also unusual.

Holotype in Coll. Carter.

ADELIUM SPINICOLLE, n. sp.

Oval; chocolate-brown, subnitid, oral organs, antennae, tarsi and margins of pronotum reddish.

Head rather coarsely and closely punctate, front depressed, labrum prominent, clypeus rounded, its sides widened and prominent (subangulate) in front of eyes, clypeal groove straight; antennae short, segment 3 not as long as 4-5 combined, 4-10 submoniliform, apical segments little widened, 11 oval. *Prothorax*: Apex arcuate-emarginate, wider than base, its anterior angles sharply dentate and advanced; base lightly bisinuate, posterior angles triangularly dentate, forming an angle of about 75° pointing obliquely outward and backward; sides well rounded, widest at middle, extreme border widely crenate, with from 6 to 8 blunt

spines limiting the crenations; foliate margins rather widely explanate; disc closely rugose-punctate, medial channel deeply impressed throughout. *Elytra* considerably wider than prothorax at base, irregularly striate-foveate, the punctures in first four striae large and irregular, in the fifth and sixth forming large cancellate foveae; the first four intervals widely convex, the fifth more strongly raised than the preceding, the seventh, ninth and the margin forming sharp costae, converging and forming sharp ridges in humeral region. Prosternum with sparse, round punctures, metasternal epimera and epipleurae coarsely punctate; post-intercoxal process widely rounded, legs moderately long, tibiae straight, post-tarsi having first segment as long as fourth. *Dim.*: 10 × 4 mm.

Hab.—Queensland National Park, MacPherson Range (H. J. Carter).

I took a single example under a log on the edge of the rain forest. It is so distinct from its nearest ally as to suggest generic separation, but as this distinction chiefly applies to the spinose-crenate border of the pronotum, it may, for the present, be included in this polymorphic genus. The brown colour may be due to immaturity, which is indicated by its rather soft tissues. The raised parts of surface are very nitid.

Holotype in Coll. Carter.

DYSTALICA ANGUSTA, n. sp.

Oblong, subdepressed; sub-opaque black, antennae and tibiae piceous, tarsi reddish, upper surface and appendages clothed with short, bristly hair; underside of tarsi pilose.

Head granulose and punctate (basal area rugose-punctate), anterior regions granulose, eyes rather round; antennae extending nearly to base of prothorax, segment 3 as long as 4-5 combined, 4-7 subtriangular, 8-10 successively more transverse, 11 pyriform, nearly twice as long as 10. *Pronotum* nearly as long as wide, apex arcuate-emarginate, anterior angles acutely produced, base feebly bisinuate, sides evenly, moderately rounded, scarcely sinuate behind; posterior angles sharply rectangular; disc opaque, densely punctate and bristled, the latter giving a granular appearance and producing a fine fringe at margins, these not at all explanate. *Scutellum* semicircular. *Elytra* subnitid, wider than prothorax at base, shoulders rather square rounded, sides subparallel in ♂, slightly obovate in ♀; striate-punctate, the deep striae containing large round punctures, rather closely placed, intervals slightly raised, granulose (where abraded of clothing). Underside opaque, the whole surface closely pitted with large, deep punctures. *Dim.*: 9.5 × 3.3-5 mm.

Hab.—Queensland National Park (Mr. R. Illidge).

Another discovery of the veteran Queensland entomologist, who has kindly sent me a pair. It is a puzzling species to place generically, but its combination of bristly, coarsely punctured surface, somewhat rounded eyes, oblong form and pilose tarsi point to *Dystalica* rather than to *Adelium*, from which it also differs in the longer and less transverse pronotum. It is certainly not a *Brycopia*.

Holotype and allotype in Coll. Carter.

LEPTOGASTRUS WILSONI, n. sp.

Elongate-ovate; dark purple-bronze, subnitid, upper surface moderately clothed with long upright dark hairs.

Head coarsely punctate, eyes oval and rather prominent, antennae moniliform, segment 3 little longer than 4, 7-10 successively widening, 11 pyriform, much

larger than 10. *Prothorax*: Apex subtruncate, base feebly sinuate, anterior angles subacute, as seen from above, but scarcely advanced; widest near middle, sides lightly rounded, narrowed but scarcely sinuate on basal half, posterior angles defined and subrectangular; base feebly sinuate; disc coarsely punctate, medial channel lightly impressed throughout. *Scutellum* minute, scarcely visible. *Elytra* wider than prothorax at base, shoulders rather widely rounded, sides subparallel for two-thirds of their length; striate-punctate, the striae deeply impressed, the seriate punctures large and close, intervals narrow, nearly flat, each with a row of large setiferous punctures placed more widely than the seriate punctures; underside subnitid, glabrous, moderately punctate. *Dim.*: 5×1.5 mm.

Hab.—New South Wales; Albury (Mr. F. E. Wilson).

A single example taken by this indefatigable collector is clearly distinct from its congeners by its combination of bronze colour, flat elytral intervals, and defined hind angles to the pronotum.

Holotype in Coll. Wilson.

PODAMARYGMUS, nov. gen. Amarygminarum.

Differs from *Amarygmus* in the abnormally elongate fore legs and their unusual tarsal clothing, the fore legs, including tarsi, when extended, being longer than the insect itself. The fore tarsi are much widened by a dense brush of long stout black hairs. These spring from the underside along the whole length of the segments, the hairs being slightly curled downwards at the tips. The mid and posterior legs as in *Amarygmus*, mandibles notched at apex.

PODAMARYGMUS ALTERNATUS, n. sp.

Ovate, convex, upper surface brilliantly metallic; head and pronotum versicolorous; elytra with 1st, 3rd, 5th and 7th intervals purple, the 2nd, 4th, 6th and 8th golden green; underside and appendages black; mid and hind tarsi rufo-pilose.

Head: Antennae as in typical *Amarygmus*, segment 1 stout, 2 short, 3 nearly as long as 4 and 5 combined, 8-11 enlarged. Eyes very close, separated by a narrow dissepiment—slightly wider in the ♀ than in the ♂ and widening in front and hind part of eyes. *Prothorax* strongly transverse, apex subtruncate, base feebly bisinuate, sides arcuately narrowed from base to apex with a narrow border continuous along apex; disc with fine sparse punctures, sometimes with a transverse linear impression near base. *Scutellum* triangular, finely punctate. *Elytra* striate-punctate, the punctures sublatent in well impressed striae, intervals moderately convex, sublaevigate, a few minute punctures discoverable thereon, the second much narrower than the first or third, underside laevigate. *Dim.*: ♂, 7×4 mm.; ♀, 8.9×5 mm.

Hab.—Malaya: Kuala Lumpur and Penang (Mr. A. M. Lea and party).

Four examples (1♂, 3♀) were amongst a collection of Tenebrionidae sent by Mr. Lea for examination.

Holotype and allotype in South Australian Museum.

Cistelidae.

ALEMEONIS RUFO-VITTIS, n. sp.

♂. Black; the mandibles, palpi, three basal segments of antennae, tibiae, tarsi (except the lamellae) and a sub-lateral vitta extending from shoulders to apex of

elytra (but not quite reaching extreme margin) castaneous; upper surface rather thickly clad with silvery upright hair, especially on apical half of elytra.

Head closely and strongly punctate, eyes large and prominent, separated by a space of the diameter of one eye; antennae with segment 1 stout, 2 short, 3 long and subcylindric, 4-10 elongate triangular, of equal length but successively wider at apex, 11 at least as long as 10, finely lanceolate. *Prothorax* rather wider than head, and a little wider than long, apex and base truncate, sides parallel, anterior angles rounded off, posterior rectangular; disc evenly and rather closely punctate and pilose; medial line indicated by a depression terminating near base in a small fovea. *Scutellum* transverse, triangular, punctate. *Elytra* considerably wider than prothorax, widest at shoulders, thence very lightly attenuated to a sharply acute apex; striate-punctate, the rather wide and deep striae containing punctures that crenulate the sides of the wide and lightly convex intervals; the latter each with an irregular row of unequally placed punctures; the castaneous colour of vitta irregularly spreading over the apical area. Underside less pilose than above; mid-tarsi lightly bowed, post-tibiae hollowed and excised near middle; post-tarsi with basal segment as long as the rest combined. *Dim.*: 10 × 2.5 mm.

Hab.—Victoria: Ferntree Gully (F. E. Wilson).

A single male specimen is readily distinguished from its nearest ally, *A. paradoxus* Cart., by the castaneous vitta of the elytra, the pale tibiae and dark femora, the pale tarsi and black lamellae. I have not cared to remove it from the card on which it is gummed to examine the underside more closely.

Type in Coll. Wilson.

CHROMOMOEIA MAJOR, n. sp.

Head and pronotum piceous, elytra and underside red, the former somewhat obfusate near apex, appendages red, antennae (partly) and knees sometimes infusate; lamella on penultimate tarsi black; above and below finely pubescent.

Head and pronotum with very fine, close, uniform punctures; eyes distant, not prominent, antennae moderately slender, segments subtriangular, 3 scarcely longer than 4, 4-10 subequal (or very slightly diminishing outwards), 11 shorter than 10. *Prothorax* nearly squarely cylindric—though appearing longer than wide—very slightly narrowed and rounded at the anterior angles—apex and base truncate; medial impression well marked at base, traceable throughout. *Scutellum* subquadrate. *Elytra* wider than prothorax at base and four times as long, sides parallel for the greater part; striate-punctate, the punctures in striae not uniseriate but rather confusedly poly-punctate; intervals convex and rather finely punctate and, where not abraded, clothed with pale recumbent hair; underside more strongly pubescent and finely punctate; post-tarsi having first segment much shorter than the rest combined. *Dim.*: 13 × 3.5 mm.

Hab.—New South Wales: Wahroonga and Bodalla (H. J. Carter).

This species is not uncommon, but has been confused—at least by myself—with *C. rufescens* Bates. I have, however, a cotype of Bates's species which shows clear distinction; *rufescens* being smaller (9-9½ mm. long), with narrower antennae and uniseriate punctures in the elytral striae. It is separated from *C. oculata* Cart., by its narrower head and less prominent eyes and from *C. picea* Macl., by its convex elytral intervals. The black tarsal lamellae are characteristic. The two examples before me are females.

Type in Coll. Carter.

HOMOTRYYSIS RUFIPILIS, n. sp.

♂. Elongate, subparallel, nitid black, pilose; palpi, apical part of antennae and tarsi reddish; whole surface rather thickly clad with upright red hair—this shorter on under surface.

Head and pronotum closely, uniformly and strongly punctate, eyes large and prominent, separated by a space equal to half the diameter of one; antennae linear, segments 3-11 subequal, scarcely at all widened at their apices, 11 not wider than 10. *Prothorax*: Apex slightly produced in middle, base truncate; widest in front of middle, thence widely rounded anteriorly, slightly narrowed without sinuation posteriorly; hind angles subrectangular; a narrow medial impression on basal half and two small basal foveae. *Elytra* considerably wider than prothorax at base; shoulders rather squarely rounded, sides parallel for the greater part; striate-punctate, the seriate punctures rather large and close, intervals lightly convex and strongly setiferous. Underside moderately punctate, the sternal area more strongly than the abdomen; fore tibiae dentate on inside near middle; subcircular forcipital sexual appendage apparent. *Dim.*: 10 × 3 (+) mm.

Hab.—N. Queensland: Watton (Mr. F. H. Taylor).

A single ♂ recently sent me by Mr. Taylor can, I think, only be confused with *H. nigricans* Hope, in being comparatively small, black, nitid and hairy; but *nigricans* has the pronotum widest at base, with subacute hind angles, the elytra more oval, little wider than the prothorax at base, with a different sculpture and the protibiae of ♂ undentate.

Holotype in Coll. Carter.

HYBRENIA ANGUSTICOLLIS, n. sp.

♀. Black, sub-nitid, glabrous, oral organs and labrum red; underside and legs reddish-brown, tarsal clothing red.

Head unusually elongate, densely and finely punctate, eyes prominent, separated by about the width of half the diameter of one eye; front between eyes to vertex deeply sulcate; antennae elongate, segments lineate, 3 much longer than 4, 4-11 subequal. *Prothorax* little wider than head, moderately convex, apex a little produced in middle, base subtruncate, widest in front of middle, anterior angles depressed and rounded, posterior rectangular; disc strongly and closely punctate, medial line rather widely and strongly impressed throughout; a transverse depression near base. *Elytra* much wider than prothorax, sides subparallel; striate-punctate, the deep striae containing close, subcancellate, rather small punctures, intervals impunctate, strongly but irregularly convex, the first three especially convex on basal half, sternal area coarsely, abdomen more finely but distinctly punctate, legs elongate. *Dim.*: 15 × 5 mm.

Hab.—Queensland: Townsville (F. H. Taylor).

A single female sent by Mr. Taylor, is an ally of *H. angustata* Macl., and *H. subsulcata* Macl., in its elongate, parallel form, but is distinguished from the former by its sulcate and less nitid pronotum and the much finer punctures of the elytral series. From both it is distinguished by its sulcate head and the unusually narrow prothorax as compared with the elytra.

Holotype in Coll. Carter.

HYBRENIA YEPPONENSIS, n. sp.

♀. Black, nitid, with short sparse pubescence; underside, femora, oral organs reddish, antennae brown.

Head and pronotum closely and strongly punctate, eyes large and prominent; separated by a distance of about the diameter of one eye; antennae having 3 longer than 4, thence to 10 subequal, each enlarged at apex, 11 narrowly lanceolate. *Prothorax* convex, apex and base truncate, sides parallel on basal half, rounded near apex, posterior angles slightly produced and subacute; disc evenly punctate, with two gentle depressions at base near angles. *Elytra* obovate, moderately convex, wider than prothorax at base, sides gradually widening to apical third; striate-punctate, the striae narrow and deep, containing close, small, rather elongate punctures; intervals nearly flat except near base, with large punctures rather closely placed, the interstitial punctures gradually smaller towards apex; third interval narrower than the rest. Sternal area strongly punctate, abdomen with light shallow punctures. *Dim.*: 14 × 5.2 mm.

Hab.—Queensland: Yeppoon (H. J. Carter).

I took four examples (all ♀) in November, 1924. It is nearest in general appearance to *H. vittata* Pasc. var. *concolor*, but may be distinguished by its more convex pronotum and strongly punctate pronotum and elytra as also by its widely spaced eyes. ♂ wanting.

Holotype in Coll. Carter.
